

REMARKS

Summary of the Office Action

In the Office Action, claims 1-2 and 4-5 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,125,091 to Kasuga. Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kasuga in view of U.S. Patent No. 5,619,521 to Tanaka.

Summary of the Response to the Office Action

Applicants have amended claims 1 and 4 to differently describe the invention. Accordingly, claims 1-5 remain pending for consideration.

Rejection under 35 U.S.C. §§ 102(e) and 103(a)

Claims 1-2 and 4-5 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kasuga. Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kasuga in view of Tanaka. To the extent that these rejections might still apply to the claims as newly-amended, they are respectfully traversed as follows.

Kasuga discloses an optical pickup apparatus for use with various types of optical disks, including CDs, CD-Rs, and DVDs. As shown in Fig. 1 of Kasuga, an optical pickup apparatus 1 includes a base 3. A first semiconductor laser 4 which emits a first laser beam L1 and a second semiconductor laser 5 which emits a second laser beam L2 are provided on the base 3 in order to allow for reading and writing of data storage media 25 including CDs, CD-Rs, and DVDs.

The Office Action alleges that Kasuga meets each of the limitations of claims 1-2, and 4-5. In particular, with regard to independent claims 1 and 4, the Office Action cites to first and

second semiconductor lasers 4 and 5 of Kasuga as meeting the “plurality of light emitting portions” recited in these claims. Moreover, the Office Action cites to the base 3 of Kasuga as meeting the “substrate” recited in independent claims 1 and 4.

Independent claim 1 has been amended to recite a laser diode chip for an optical pickup apparatus in which the laser diode chip includes a combination of a substrate; and a plurality of light emitting portions which are formed on the substrate for emitting laser beams to be irradiated to a recording medium in a same emitting direction, each of said plurality of light emitting portions being provided for reading information recorded on a recording medium and the laser beams having different wavelengths so as to correspond to different types of recording medium, wherein respective light emitting points of said plurality of light emitting portions are located at different positions in the emitting direction.

Applicants respectfully submit that Kasuga discloses an optical pickup apparatus which includes a base 3, and first and second semiconductor lasers 4 and 5, as shown in Fig. 1. The first semiconductor laser 4 is disclosed as emitting a laser beam L1 having a 780 nm wavelength, and the second semiconductor laser 5 is disclosed as emitting a laser beam L2 having a 650 to 630 nm wavelength. The semiconductor lasers 4 and 5 are disclosed in Kasuga as being mounted on the base 3.

However, Applicants respectfully submit that in Kasuga, the base 3 is provided for supporting the optical system of the optical pickup apparatus. In particular, the optical system, which includes a collimator lens 7, a mirror 8, an objective lens 9, a sensor lens 10, a photo detector 11, and beam splitters 21, 22 as well as the semiconductor lasers 4 and 5 are constructed on the base 3. As disclosed in Kasuga, the base 3 is a portion of the optical pickup apparatus. There is no teaching or suggestion in Kasuga of providing the base 3 as a portion for forming a

chip with only the semiconductor lasers 4 and 5, as disclosed in the instant application and recited in the claims.

In the arrangement of the instant invention, and as recited in newly-amended claim 1, the substrate and the plurality of light emitting portions are formed as one body, namely a laser diode chip in the optical pickup apparatus. Applicants respectfully submit that the substrate, as recited in the claims and discussed in the specification, is a portion of the laser diode chip, not a part for constructing an optical system including an objective lens and so on in the optical pickup apparatus. Therefore, Applicants respectfully submit that the base 3 of Kasuga does not correspond to the substrate in claim 1.

The specification of the instant application clearly defines the meaning of its use of the terms “chip” and “substrate” in its discussion of how the placement of its plurality of light emitting portions on the same substrate allows for minimizing the overall number of parts required in the optical system and thus results in simplifying and miniaturizing the overall optical pickup apparatus. The corresponding figures also support these uses of the terms “chip” and “substrate,” as recited in the claims.

The arrangement disclosed by Kasuga, on the other hand, is more similar to the arrangement shown in the “Description of the Related Art” portion of the instant application, and shown in Fig. 1, in which no such common substrate is suggested. Moreover, Applicants further traverse the Office Action’s interpretation of the “substrate” of the instant application’s claims as being the base of Kasuga because col. 3, lines 14-15 of Kasuga teach that the entire optical system described in Kasuga is constructed on the base 3, as discussed above.

Also along these lines, claim 4 has been newly-amended to recite an optical pickup apparatus combination that includes a light emitting device which has a substrate, and a plurality of light emitting portions for emitting laser beams to be irradiated to a recording medium are formed on the substrate, each of said plurality of light emitting portions being provided for reading information recorded on a recording medium and the laser beams having different wavelengths and are selectively emitted in a same emitting direction from one of said plurality of light emitting portions in accordance with the type of said recording medium; and an optical system for guiding the laser beams emitted from said light emitting device to a recording surface of said recording medium and guiding a laser beam reflected by the recording surface of said recording medium to a photosensing device, wherein said light emitting device is constructed so that respective light emitting points of said plurality of light emitting portions are located at different positions in the emitting direction.

Applicants respectfully submit that in newly-amended claim 4, the recited “substrate” is also different from the base 3 of Kasuga, along the lines of discussion set forth above with regard to independent claim 1. Even further, independent claim 4 recites an optical pickup apparatus combination that includes both a “light emitting device which has a substrate, and a plurality of light emitting portions for emitting laser beams to be irradiated to a recording medium are formed on said substrate (emphasis added)” as well as “an optical system for guiding the laser beams” as a separate element of the apparatus. However, as discussed above, Kasuga teaches that the entire optical system described in the patent is constructed on the base 3, which the Office Action interprets merely as the “substrate” of the light emitting device as recited in the instant application’s claims.

Applicants respectfully assert that the rejection under 35 U.S.C. § 102(e) should be

withdrawn because Kasuga does not teach or suggest each feature of independent claims 1 and 4, as amended. As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)." Furthermore, Applicants respectfully assert that dependent claims 2 and 5 are allowable at least because of their respective dependence from independent claims 1 and 4, as amended, and the reasons set forth above.

The Office Action applies Tanaka as a secondary reference in combination with Kasuga in its rejection of claim 3 under 35 U.S.C. § 103(a). This combination rejection is respectfully traversed for at least the following reasons.

Tanaka discloses a semiconductor laser system in which light emitting parts LD1 to LD3 are formed on one surface of the substrate 1 and a lower electrode 24 is formed on the other surface of the substrate 1, as shown in Figs. 2(a) and 2(b). However, Applicants respectfully submit that because the base 3 of Kasuga does not teach or suggest the provision of a substrate in a laser diode chip, as described above, it is apparent that the feature of claim 3 could not be obtained by merely applying the technique of Tanaka to the technique of Kasuga.

In other words, Applicants respectfully assert that the rejections under 35 U.S.C. § 103(a) should be withdrawn because neither Kasuga nor Tanaka, whether taken singly or combined, teach or suggest each feature of claim 3, especially when taking into consideration the amendment of its independent claim 1. MPEP § 2143.03 instructs that "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 409 F.2d 981, 180 USPQ 580 (CCPA 1974)."

CONCLUSION

In view of the foregoing, Applicants respectfully request reconsideration and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution.


EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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Dated: September 22, 2003

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